



# ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW4098  
 UNIQUE ID NUMBER: 5PW076  
 COMBUSTOR:  
 ENGINE TYPE: TF

BYPASS RATIO:  
 PRESSURE RATIO ( $\pi_{00}$ ): 41.4  
 RATED THRUST ( $F_{00}$ ) (kN): 424.1

### REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
D <sub>p</sub> /F <sub>00</sub> (g/kN) or SN	0.0	10.2	88.2	12.0
AS % OF ORIGINAL LIMIT	0.0	8.6	71.9	75.3
AS % OF CAEP/2 LIMIT (NO <sub>x</sub> )			89.8	
AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )			98.3	
AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )			107.9	
AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )			121.1	

### DATA STATUS

- PRE-REGULATION  
 x CERTIFICATION  
 - REVISED (SEE REMARKS)

### TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES  
 x DEDICATED ENGINES TO PRODUCTION STANDARD  
 - OTHER (SEE REMARKS)

### EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE  
 (ANNEX 16 VOLUME II)

### CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)  
 x OUT OF PRODUCTION (DATE: - )  
 x OUT OF SERVICE (DATE: 2006 )

### MEASURED DATA

MODE	POWER SETTING (%F <sub>00</sub> )	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO <sub>x</sub>	
TAKE-OFF	100	0.7	4.138	0.00	0.16	51.29	6.7
CLIMB OUT	85	2.2	3.245	0.00	0.21	36.45	7.9
APPROACH	30	4.0	1.075	0.00	0.70	14.89	2.4
IDLE	7	26.0	0.321	0.00	6.48	7.78	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			1361	0	3543	32265	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D <sub>p</sub> /F <sub>00</sub> (g/kN) or AVERAGE SN (MAX)				0.0	8.4	76.1	9.3
SIGMA (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)							
RANGE (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)							

### ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS  
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

### ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	101.7-102.5
TEMPERATURE (K)	284-289
ABS HUMIDITY (kg/kg)	0.00274-0.00608

### FUEL

SPEC	Jet A
H/C	1.9
AROM (%)	15.5

MANUFACTURER: Pratt & Whitney  
 TEST ORGANIZATION: Pratt & Whitney  
 TEST LOCATION: East Hartford, CT  
 TEST DATES: 03/01/1998-04/01/1998

### REMARKS

1. Data from Report PWA-6726-01

Compliance with Fuel Venting requirements:

- ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)